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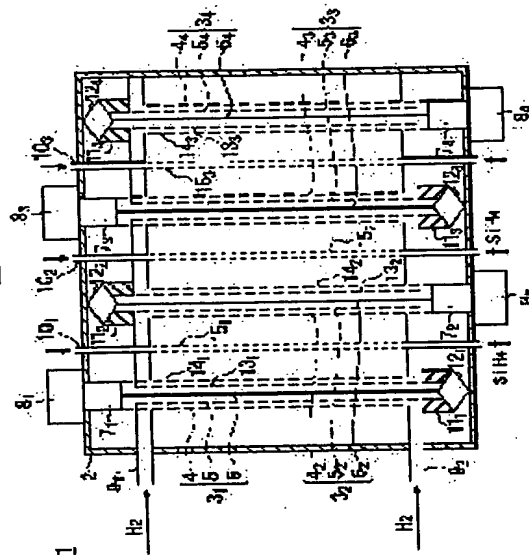
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## (54) ANTENNA UNIT AND PLASMA PROCESSING APPARATUS

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a plasma CVD (chemical vapor deposition) unit for forming a thin film on a large area substrate.

SOLUTION: The invention comprises antenna lines 31-34, each of which have antenna line 61-64, shield pipes 51-54 and protection pipes 41-44. If microwaves are transmitted to the antenna line 61-64 with H<sub>2</sub> gas in the shielded pipes 51-54, it emanates radio wave from through-holes 141-144 of the protection pipes 41-44 and makes H<sub>2</sub> gas emanating from the same through-holes 141-144 into plasma. If raw gas is emanated from pipes 101-104 for introducing the raw gas arranged in the vicinity of it, it is decomposed by plasma and is formed into film by vapor deposition on substrates 221-224 arranged in the vicinity of it. Because the antenna lines 31-34 are arranged in equal intervals, the plasma generated from the antenna lines 31-34 overlap each other, the plasma density on the surface of substrate is uniform, and it can form a uniform film on the surface of substrate.

## LEGAL STATUS

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